

Facility Name: **Georgia-Pacific Wood Products South LLC Lumber Mill**

City: Rome

County: Floyd

AIRS #: 04-13-115-00016

Application #: TV-523940

Date SIP Application Received: N/A

Date Title V Application Received: December 16, 2020

Permit No: 2421-115-0016-V-06-1

Program	Review Engineers	Review Managers
SSPP	S. Ganapathy	Jeng-Hon Su
SSCP	Travis Harris	Stacey Wix
ISMU	Joanna Pecko	Dan McCain
TOXICS	n/a	n/a
Permitting Program Manager		Eric Cornwell

Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
2421-115-0016-V-06-0	March 25, 2019	Administrative Permit Amendment Name and Owner Change

B. Regulatory Status**1. PSD/NSR/RACT**

Non-Attainment Area New Source Review (NAA NSR) is not applicable to Georgia-Pacific Wood Products South LLC Lumber Mill (hereinafter “facility”) since Floyd County is an attainment area for all criteria pollutants.

The facility is a major source with regards to the Prevention of Significant Deterioration (PSD) regulations. The facility is a major source with regards to the PSD rules because the potential to emit (PTE) Volatile Organic Compounds (VOCs) is greater than the PSD major source threshold of 250 tons per year (ton/yr). The existing batch kilns LDK1, LDK2 and LDK3 are subject to a PSD drying limit of 220 MMBF/year. The direct fired continuous kiln is subject to a PSD drying limit of 125 MMBF/year. Currently the permit has a PSD avoidance limit of 6400 hours/year for operation of the planer mill cyclone.

Floyd County is not on the applicable county list in Georgia Rule (tt), so VOC RACT is not applicable to Rome Lumber Mill.

2. Title V Major Source Status by Pollutant**Table 2: Title V Major Source Status**

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility’s Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	✓	✓		
PM ₁₀	✓	✓		
PM _{2.5}	✓	✓		
SO ₂	✓			✓
VOC	✓	✓		
NO _x	✓			✓

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
CO	✓			✓
Individual HAP	✓	✓		
Total HAPs	✓	✓		

II. Proposed Modification

A. Description of Modification

The facility's current permit limits operation of the Planer Mill to 6,400 hours per year. Stack testing in May 2020 demonstrated compliance with the Planer mill PM_{2.5} and PM₁₀ hourly emission limits in Conditions 3.3.3 and 3.3.5.

The Permittee requested that the hourly operational limit for the Planer Mill in Condition 3.3.4 be replaced with the annual PM_{2.5} and PM₁₀ emission limit. The 15.8-tpy PM₁₀ and 8.0-tpy PM_{2.5} emission caps are equivalent to the annual emission caps with the hourly emission limits specified in existing Conditions 3.3.3 and 3.3.5 and the annual operating hourly limit specified in existing Condition 3.3.4.

The facility conducted the initial performance test required by existing Condition 4.2.1 of Title V Permit No. 2421-115-0016-V-06-0 on May 13, 2020. The tested Planer mill PM_{2.5} and PM₁₀ hourly emissions clearly demonstrated that even at 8760 hours of operation, additional PM_{2.5} and PM₁₀ emissions caused by the planer mill replacement project will be less than the associated PSD significant emission rates (SER) for these pollutants. Without any emission and operating caps, the planer mill replacement project would not trigger any PSD review. Therefore, the Division has determined to not include any annual operational limit for the planer mill cyclone and hourly PM₁₀/PM_{2.5} emission limits for the Planer mill emissions. Please refer to Section IV.C. for more detailed discussion.

B. Emissions Change

There is no emission change due to the proposed changes in this permit amendment.

C. PSD/NSR Applicability

PSD/NSR is not applicable since there is no increase in emission of any pollutant in this permit amendment.

III. Facility Wide Requirements

There is no change to currently permitted/applicable facility wide requirements.

IV. Regulated Equipment Requirements**A. Brief Process Description**

The facility submitted Application No. TV-523940 to replace the PSD avoidance limits for the new planer mill (ID No. PM). At the planer mill, dried lumber is planed, trimmed, sorted, and packaged for shipping. Exhaust from the planer mill is routed to the high efficiency planer mill cyclone (ID No. PMC) which vents to the atmosphere.

B. Equipment List for the Process

There is no change to currently permitted equipment at the facility.

C. Equipment & Rule Applicability**Emission and Operating Caps –**

When the facility submitted Application No. TV-313461 in December 2018 for replacing the planer mill (ID No. PM), they proposed to cap additional PSD avoidance annual emission increases of PM₁₀ and PM_{2.5} from the new planer mill, in order to avoid a PSD review, with the hourly emission limits specified in existing Conditions 3.3.3 and 3.3.5 and the annual operating hourly limit specified in existing Condition 3.3.4.

Equivalent PM₁₀ Annual PSD Avoidance Emission Cap
= (4.94 lbs PM₁₀/hr) * (6,400 hrs/yr) * (1ton/2,000 lbs)
= 15.8 tpy PM₁₀

Equivalent PM_{2.5} Annual PSD Avoidance Emission Cap
= (2.5 lbs PM_{2.5}/hr) * (6,400 hrs/yr) * (1ton/2,000 lbs)
= 8.0 tpy PM_{2.5}

With netting, the resulting emission increases are 14.7 tpy PM₁₀ and 6.9 tpy PM_{2.5}. Since the net emission increases are lower than the associated PSD significant emission rates, 15 tpy and 10 tpy, respectively, the replacement of the planer mill did not trigger a PSD review (NSR).

Stack testing in May 2020 demonstrated compliance with the Planer mill PM_{2.5} and PM₁₀ hourly emission limits in Conditions 3.3.3 and 3.3.5. The Permittee requested that the hourly operational limit for the Planer Mill in Condition 3.3.4 be replaced with the equivalent annual PM_{2.5} and PM₁₀ emission limits in this permit amendment. The facility would track actual PM₁₀ and PM_{2.5} emissions using the tested emission factors, which are lower than the existing hourly emission limits; thus, the facility will be able to operate the planer mill (ID No. PM) more than 6,400 hours per year while the equivalent annual PSD avoidance emission limits are still being met.

The facility recently supplemented additional information for the May 13, 2020, test to the Division's Industrial Source Monitoring Unit (ISMU) and requested that ISMU review the test report again. ISMU has approved the revised test report and summarized that the planer mill after-control PM₁₀ and PM_{2.5} emission rates are both 1.47 lbs/hr. With the revised test results, and 8,760-hrs/yr of operation, the net emission increases for the planer mill replacement project (originally included in Table 4 of

the narrative that explained Title V Permit Amendment No. 2421-115-0016-V-05-2) would have been updated as follows:

Table 3: Net Emission Increases (tpy) for The Planer Mill Replacement Project

Source Description	PM	PM10	PM2.5	VOC
New Planer Mill	17.83	6.44	6.44	--
Shutdown of Existing Planer Mill	-1.27	-1.79	-1.29	--
Associated Emission Increases	2.13	0.70	0.19	0.18
Net Emission Increases	18.7	5.35	5.34	0.18
PSD SER	25	15	10	40
PSD Review Triggered?	No	No	No	No

Since the net PM₁₀ and PM_{2.5} emission increases are below the associated PSD SER's, the planer mill replacement project would not trigger any PSD review. The facility only needs to operate the planer mill cyclone (ID No. PMC) at all times when the planer mill (ID No. PM) is in operation; without any additional operating caps, there is still a good margin between the new emission increases and the associated PSD SER's. Therefore, the Division has determined the following:

- The only PSD avoidance limit needed for the planer mill replacement project is to operate the Planer mill Cyclone PMC whenever the planer mill is in operation. Therefore, the citation of existing Condition 3.2.3 has been modified in this permit amendment. The monitoring requirements specified in existing Conditions 5.2.1, 5.2.3, and 5.2.4 are sufficient to ensure proper operation of Cyclone PMC.
- EPD has determined that the proposed 15.8-tpy PM₁₀ and 8.0-tpy PM_{2.5} limits for the Planer Mill (via Cyclone PMC) are not necessary.
- EPD has also determined that the hourly emission limits and operating hour limit specified in existing Conditions 3.3.3 through 3.3.5 are no longer needed.
- Existing Condition 4.2.1 of Permit V-06-0 is a one-time test requirement that has been satisfied with the 5/13/2020 test. Therefore, Condition 4.2.1 has been deleted by this Title V permit amendment.
- Since the operating cap specified in existing Condition 3.3.4 is deleted by the Title V permit amendment, the associated record keeping and reporting requirements specified in existing Conditions 6.2.9 and 6.2.10 of Title V Permit No. 2421-115-0016-V-06-0 are also not needed and were deleted.

Applicable Rules and Regulations -

There is no change to rule applicability to currently permitted equipment.

D. Permit Conditions

As discussed previously, existing Conditions 3.3.3 through 3.3.5 are deleted in this permit amendment because they are no longer necessary to assure PSD avoidance. The only requirement is to operate the Plane mill cyclone (PMC) whenever the Planer mill operates. The citation of existing Condition 3.2.3 has been modified accordingly.

V. Testing Requirements (with Associated Record Keeping and Reporting)

The initial testing requirement specified in existing Condition 4.2.1 has been satisfied with the performance tests conducted on May 13, 2020. Therefore, the condition has been deleted by this Title V permit amendment.

VI. Monitoring Requirements (with Associated Record Keeping and Reporting)

Not applicable. No change has been made to Section 5.2 permit conditions in this permit amendment.

VII. Other Record Keeping and Reporting Requirements

Existing Conditions 6.2.9 and 6.2.10 are deleted in this permit amendment since the hourly operating cap specified in existing Condition 3.3.4 is deleted. The facility no longer needs to track the operating hour of the planer mill (ID No. PM).

VIII. Specific Requirements

None.

Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//